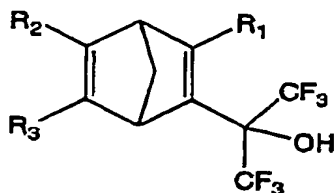


ABSTRACT OF THE DISCLOSURE

A fluorine-containing cyclic compound is represented by the formula 1:



(1)

5 wherein each of R₁, R₂ and R₃ independently represents a hydrogen, alkyl group, fluorine, fluoroalkyl group or hexafluorocarbon group,

 wherein at least one of the hexafluorocarbon groups may partly or totally be protected with a protecting group, and

10 wherein the protecting group is (a) a straight-chain, branched or cyclic hydrocarbon group having a carbon atom number of 1-25 or (b) an aromatic hydrocarbon group and optionally contains a fluorine atom, oxygen atom, nitrogen atom or carbonyl bond.